

REMARKS

By this amendment, claims 1-21 are pending, in which claims 1, 11 and 21 are currently amended. No new matter is introduced.

The Office Action mailed January 29, 2007 rejected claims 1-20 under 35 U.S.C. § 103 as obvious over *Golani et al.* (US Pub. No. 20040260590) in view of *Krum* (US Pat. 6,618,820), and claim 21 under 35 U.S.C. § 102 as anticipated by *Fizsman et al.* (US Pat. 6,115,646). Additionally, claim 1 is also rejected under 35 U.S.C. § 112, second paragraph as being indefinite.

To reduce issues for potential Appeal, Applicants have amended independent claim 1 to incorporate the features of dependent claim 2 (now canceled). Also, independent claim 11, as amended, now includes features of dependent claim 12 (now canceled). Further, independent claim 21 incorporates features of dependent claim 2.

For a supposed teaching of dependent claim 2, the Examiner cites paragraph [0068] of *Golani et al.*, which states:

[0068] There is an execution in the log such that the extended life spans of  $a_i$  and  $a_j$  overlap. Activity  $a_i$  depends on activity  $a_j$  with respect to the process log iff whenever  $a_i$  appears in some execution in the log,  $a_j$  appears in that execution some time earlier, and the time of the termination event of  $a_j$  is smaller than the time of the ready event of  $a_i$ . Since some legal executions may not be present in the log, and since parallel activities may appear sequentially in an execution, some activities that are not mutually dependent in the actual workflow process may be considered to be dependent with respect to the log. Activity  $a_i$  is not a successor of  $a_j$  with respect to the log if in every execution in the log, at most one of  $a_i$  and  $a_j$  is present.

As evident from the above passage, in the *Golani et al.* system individual process execution logs over the same set of activities are used to derive dependent activities. By contrast, claim 1 recites “wherein said representation is configured to define non-overlapping sections of the process, and having at most as many active instances of the process as said non overlapping

sections of the process, wherein each of said instances of the process having at most one non-overlapping section that has nodes in statuses other than 'notreached' or 'completed', and nodes in other sections in the same 'notreached' or 'completed' status." The cited passage makes no mention of these very specific features.

As for claim 11, this amended claim recites "tagging some of the nodes in the representation as boundary nodes that define a plurality of sections of the dataflow, wherein the scheduled task is operating in one of the sections; and scheduling another task in another section of the dataflow, wherein the scheduled tasks and the other scheduled task are active at the same time." The Examiner, on page 8 of the Office Action, refers to paragraph [0060] of *Golani et al.* This cited paragraph states as follows:

[0060] For the purposes of the methods described below, we define a "legal flow" as a maximal connected subgraph of the workflow graph such that the control function evaluates to TRUE on each edge in the subgraph, both the start and end activities of the process are in the subgraph, and every activity (node) is on a directed path from start to end. A legal flow graph over a set of activities is a partial order representing all possible ways to schedule the selected activities, i.e., all possible executions. In such a legal flow graph, all nodes are assumed to be of the AND type, i.e., all the edges into and out of each of the nodes are traversed, so that an activity can be executed only if all its predecessor activities in the flow graph finished executing (AND join), and its successor activities can start executing only when its done (AND split). The union of all the legal flow graphs reconstructs the complete process graph.

At best, *Golani et al.* discloses a conventional graph model with nodes connected by edges using AND joins and AND splits. This does not amount to the claimed features. To assist the Examiner in understanding the difference between the reference and the claimed invention, the Examiner is directed to Applicants' Specification, which discloses a graph model that divides the graph into sections (slices) for the purpose of overlapping time consuming operations from two different graph executions to improve speed (page 10, paragraph [40]), also called time heterogeneity (page 4, paragraph [09]).

The newly applied reference of *Krum*, which is applied for a supposed teaching of an event router, does not fill in the gaps of *Golani et al.* Therefore, the obviousness rejections are unsustainable.

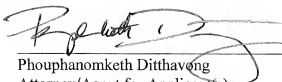
With respect to the anticipation rejection of claim 21 over *Fiszman et al.*, claim 21, as amended, recites "wherein the information define a plurality of sections, and one of the tasks is scheduled in one of the sections, and another one of the tasks is scheduled in another one of the sections, the scheduled tasks being active at the same time." Neither *Fiszman et al.* or any of the applied references, alone or in combination, disclose this feature. Accordingly, Applicants requests withdrawal of the rejection.

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 425-8508 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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